THE IMMIGRATION OF LEPIDOPTERA TO THE BRITISH ISLES IN 1984

By R. F. Bretherton* and J. M. Chalmers-Hunt**

(concluded from p. 185)

AGRIUS CONVOLVULI L. (imagines 29, larvae c.30, pupae 5). BERKS. Shrivenham, 19.8, almost full grown larva (S. Nash, Ent. Gaz. 36: 37). DORSET Portland B. O., Larva photographed 12.9. ESSEX S. Bradwell-on-Sea, imagines 22.7, 25.7, 30.7 (SD), 29.7 (AJD). HANTS S. Hayling Island, imago at buddleia 7.7 (JMW). HANTS N. Oakley, imago outside window 22.9 (AHD). KENT E. Greatstone, 19.10, dead larva (TWH). KENT W. East Malling, 3.9, larva on lawn, pupated next day (MAE, Ent. Rec. 96:288); Dartford, 30.9, male imago (BKW). LINCS N. Marsh Chapel, 21.7, larva (JD); South Thoresby, imago 9.8, Alford, mid 9, full grown larva (REMP). NORFOLK E. Hickling, imagines 29.7, male, 30.7, female, both worn (TNDP). SOMERSET N. Western-sub-Mendip, larvae 11.9, 16.9 found pupating, 28.9, pupae 4.10, two, 13.10, two (NWL, Ent. Rec. 97: 26-27). SURREY Leigh, 23.7, worn imago (RF). SUSSEX E. Imagines: Rye, mid June, at flowers (P. Baylis); Camber, 18.6 (CRP); Ringmer, 9.8 (A. Batten); Ninfield, 25.8 (MP); Lullington Heath, 16.9 (MP); Lewes, 3.10 (P. Newnham); larvae: Plumpton, 28.9 (B. Fordham); Ringmer, 30.9 (B. Edgar); Rye, 28.9 full grown, green form (P. Baylis). SUSSEX W. Imagines: West Dean, 25.7 (C. Robinson); Pagham, 5.8 (R. Lord); Walberton (J. Radford); Petworth (S. Church). WARWICKS. Pailton, 26.7, female imago (Dr. Greenwood). WESTMORLAND Beetham, 12.9 (JB). WORCS. Pupae, Little Comberton, 29.9, 4.10, imago emerged 26.11 (C. Grove). YORKS, (V.C.61 and V.C.62). No imagines, but nine larvae positively identified and another eight or ten reported (PQW): Brompton-by-Sawdon, 11.9, two full grown (C. I. Massey); Ganton, c.19.9 (M. Robinson); Flixton, 26.9 two, 29.9, and c.six earlier (several recorders); Burton Fleming, 27.9, one diseased in garden and a few earlier (T. A. Potter); Seamar, 1.10, in school field (J. Childs). GLAMORGAN Rhosseli, imagines c.12.6, 2.9 very worn (BJMN). GUERNSEY 2.9, imago; late 9, four larvae, full grown (TNDP).

ACHERONTIA ATROPOS L. (imagines 9, larvae c.119, pupae 11). BERKS. Shrivenham, larva 18.9 (S. Nash, *Ent. Gaz.* 36: 77). DORSET Cheselbourne, 16.8, up to three imagines Dr. J. Norman (per NRW); Church Knowle, 18.9, six larvae (NRW). GLOS. N. Lechlade, 26.9, full grown larva on woody nightshade (*Solanum dulcamara*), 19.10, three, 21.10, (R. Singleton, E. W. Classey,

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Ent. Gaz. 36: 78, 30). HANTS, N. Chilbolton, c.20.9, two larvae. HANTS. S. Larvae: Timsbury, 12,9 (DHS); Soberton, 18.9, full grown (JRL, Ent. Gaz. 36: 54). HUNTS, Wiston, 12.9, two full grown larvae (Mrs. M. S. L. Simpson, Bull, amat. Ent. Soc. 44: 25). HERE-FORD S. Putley, 20.8, imago; Kingstone, 17.9, full grown on forsythia, imago emerged 21.12 (MWH). KENT E. Stone Street, Canterbury, 12.8, dead on road, (H. Harris). Larvae: Kingsnorth, 27.7, three on potato patch (TWH); Aylesford, 29.8, eight (MRE, Ent. Rec. 96: 288); Biddenden, 11.9, one on clematis, soon died (Miss D. Dunstan); Nonington, 21.9, brown form, 18.10 (M. Gambrell); Maidstone, five on potato, early 10 (BKW); Selling, 17.10 (S. Coulton); Preston near Wingham, 30.9, 20.10 (M. Kemp). Pupae: Snargate, 8.10 (Mrs. Wheal); Faversham, 16.10 (Lyons). KENT. W. Larvae: Farnborough, 30.7, male emerged (PAS); West Wickham, 11.9, two full grown (R. F. Birchenough); Higham, mid 9, (Mrs. Bengly); between Shorne and Higham, late 9, three (I. Ferguson); Longfield, near Gravesend, 12.10 (Mrs. Crawley). Pupa: Isle of Grain (A. Smith). LANCS. N. Lancaster, 16.8, full grown larva (PJB). OXON. Larvae: Overmorton, September, two: Oxford District, one (PHS). LINCS. N. Somercotes, two larvae injured in potato field (per REMP). SOMERSET N. Westbury-sub-Mendip, larvae: 3/8.9, c.25 on potato patches, all pupated by 11.9; 9.9., three, 11.9, four, 16.9, four half grown; 25/30.10; c.12; pupae: 9.9., 18.9, 4.10 two, 13.10 two (NWL, Ent. Rec. 97: 26-27); Hinton Charterhouse, 18.9, two full grown larvae (BWM, Ent. Rec. 97: 36). SURREY Larvae: Haslemere, 26.8 (JSCT); Ripley, 8.9, full grown (AJH), SUSSEX E. Larvae: Plumpton, 28.9, full grown (B. Fordham); Lewes, c.1.10, full grown (L. Cousens); Hailsham, early 10 ("Living World", per CRP). SUSSEX W. Imago: Goring, 21.7, caught by day on beach (DD). WARWICKS. Loxley, 10.10, one larva and two pupae by potato pickers, 22.10, full grown larva on jasmine (per DCGB). WORCS. Pershore, 19.9, on potato (P. F. Whitehead, Ent. Gaz. 36: 77); Drakes Broughton, mid. September, full grown larva; Little Comberton, 20.9, imago emerged 4.12 (per JEG). YORKS (v.c.62) Imagines: Scarborough, 15.8, found on wall of beach chalet; 18.9, one on fishing boat c.80 miles north east of Scarborough (per PQW). CAITHNESS Huna, 28.9, "large moth stung to death by bees", identified from description and photo in local newspaper (S. Swanson). GUERNSEY mid September, four full grown larvae (TNDP). ALDERNEY 20.9, larva (TNDP).

DAPHNIS NERII L. SUSSEX W. Worthing, 25.6, found damaged and dead, passed to Miss B. Stonier for identification (Worthing Naturalists' Report, 1983/1984: 37).

LYMANTRIA DISPAR L. GUERNSEY males at light 19.8, 24.8, 13.9. (TNDP).

*EILEMA GRISEOLA Hb. CO. CORK Fountainstown, 23.8, female. First confirmed Irish record (AAM). Probable immigrant.

*EILEMA COMPLANA L. WESTMORLAND Beetham, 1.8.

Possibly immigrant, see L. quadra.

*LITHOSIA QUADRA L. WESTMORLAND Beetham, 28.7, three, 29.7, two, 31.7, nine, 1.8. (JB, Ent. Rec, 97:13). The dates suggest immigration of the three last footmen moths; otherwise a massive internal migration from distant areas of residence. It was also reported from Trebrownbridge, East Cornwall, 26.7, 29.7; from West Sussex, West Dean, 6.8 (C. Robinson per CRP); and Wychwood, Oxon, no date (CWDG).

*EUPLAGIA QUADRIPUNCTARIA Poda. CORNWALL E. Sheviock, 22.8, 25.8, at light (SCM); Mt. Edgecombe, 28.8, in garden (per SCM). DORSET Portland B. O., 18.8, 21.8. SUSSEX E. Playden, 7.8, at light (MWFT). Possibly immigrants, if not spread from South Devon.

*CLOSTERA ANACHORETA D. & S. KENT E. Dungeness, 2.6 (CWP, Ent. Rec., 96:211).

AGROTIS PUTA Hb. CO. CORK Fountainstown, 23.8, female.

First confirmed Irish record. (AAM). Probable immigrant.

AGROTIS CRASSA Hb. CO. CORK. Fountainstown, 20.8, male (AAM). First Irish record; no confirmed record for Britain, but resident in Channel Islands.

*EUROIS OCCULTA L. (19) HANTS S. Winchester, 1.8, pale form (DHS). HERTS. Much Hadham, 14.8, very worn female (DEW). LINCS N. Gibraltar Point, 11.8, pale form (MJS), 27.8 (REMP); South Thoresby, 9.8, 11.8, 26.8, 27.8, 29.8 (REMP). NORFOLK E. West Somerton, 14.8, two (BG). YORKS. (V.C. 61) Rudston, 24.7, female, 27.8, male (A. S. Ezard); Muston, 27.8, male, 28.8, female (PQW). YORKS. (V.C. 62) Wykeham Forest, between 20.8 and 2.9, female (PQW). ORKNEY Sterness, 3.8 (E. R. Meek); Scorradale, 17.8, male, worn (RIL).

*DISCESTRA TRIFOLII Hufn. CO. CORK Fountainstown,

20.8 (AAM). Probably immigrant.

MYTHIMNA ALBIPUNCTA D. & S. (17) CORNWALL W. Lizard, 20.8, two at sugar (RJR), 23.8, three (NMH); Kynance, 25.8, five (NMH). CORNWALL E. Sheviock, 20.8; Trebrownbridge, 21.8 (AS). DORSET Lodmoor, 26.8 (MC). ESSEX S. Bradwell-on-Sea, 1.11 (AJD). ESSEX N. Little Oakley, 22.8 (AME). SUSSEX E. Peacehaven, 28.8 (CRP). SUSSEX W. Walberton, 1.11 (J. Radford).

MYTHIMNA VITELLINA Hb. (6) CORNWALL E. Trebrownbridge, 21.8 (AS). ESSEX S. Bradwell-on-Sea, 8.10 (AJD). SURREY Buckland, 10.11 (CH). SUSSEX W. Walberton, 9.11 (J. Radford

per CRP); Petworth, 11.11, two (SC).

MYTHIMNA UNIPUNCTA Haw. (14) CORNWALL E. Tre-brownbridge, 1.11 (AS). ESSEX S. Bradwell-on-Sea, 27.10, 1.11, 6.12, 24.12 (AJD, SD). HANTS S. Hayling Island, 21.10, 21.12 (JMW). SUSSEX E. Peacehaven, 5.12 (CRP). SUSSEX W. Walberton,

23.10, 1.11, 28.11, 3.12 (J. Radford per CRP), Petworth, 12.11 (SC). ARGYLL Barcaldine, 14.10 (JCAC).

MYTHIMNA LOREYI Dup. DORSET Charmouth, 29.8 (RJR). TRACHEA ATRIPLICIS L. GUERNSEY St. Saviour's 28.7 (R. Austen per TNDP). First Channel Islands record.

*ENARGIA PALEACEA Esp. KENT E. Orlestone Forest, 31.7

(J. Fenn, Ent. Rec. 96: 215). Probably immigrant.

*AMPHIPOEA Species not yet determined. YORKS. (V.C.61) Rudston, 30.8/5.9, with night peaks in trap 1.9 (17) and another of eleven (A. S. Ezard per PQW); Muston, 28.9, three, 30.8, three, 31.8, thirteen (PQW). Winds on these dates were north west; this seems to have been an internal migration, possibly from the North Yorkshire moors.

SPODOPTERA EXIGUA Hb. BERKS. Uffington, 3.8 (E. W. Classey, Ent. Gaz. 35: 256). CORNWALL W. Lizard, 14.9 (DCGB); Coverack, 16.9 (BRB). CORNWALL E. Sheviock, 24.8 (SCM); Trebrownbridge, 24.8 (AS). ESSEX S. Bradwell-on-Sea, 9.7, 21.7, 31.7, two, 7.8, 3.9 (SD). HANTS S. Ashurst, 1.8 (S. W. Pooles); Hayling Island, 25.7, 8.8 (JMW). SUSSEX E. Peacehaven, 30.7 (CPR), Ninfield, 30.7 (MP). WARWICKS. Charlecote, 6.8 (AG), 13.9 (DCGB). WILTS. S. Trowbridge, Ashton Common, 12.8 (EGS). GUERNSEY, 25.7, 27.8 (TNDP).

*HELIOTHIS MARITIMA Graslin. CORNWALL S. Porthleven, 23.7, rather worn (N. Gill).

HELIOTHIS PELTIGERA D. & S. (3) CORNWALL E. Sheviock, 11.9 (SCM). ESSEX N. Little Leighs, 19.7 (AME). NORFOLK W. Downham Market, 20.8 (JKMH).

TRICHOPLUSIA NI Hb. ESSEX S. Bradwell-on-Sea, 12.8, two (AJD).

*TRISATELES EMORTUALIS D. & S. KENT E. Orlestone Forest, 31.7, male (JLF, *Ent. Rec.* **96**: 215). GUERNSEY Le Chene, 22.7. First island record, probably immigrant (TNDP).

Annexe II

Late Records

DIASEMIOPSIS RAMBURIALIS Dup. ESSEX S. Matching, 13.7 (RF).

RHODOMETRA SACRARIA L. DEVON S. Axminster, 4,8 (E. C. Pelham-Clinton). KENT W. East Malling, 16.9 (D. A. Chambers). SOMERSET N. Lympsham, 10.9, 11.9, four, 13.9, two (E. C. Pelham-Clinton). YORKS (v.c. 63), Firbeck, 2.9; East Dean, 27.9 (per S. M. Jackson). YORKS (v.c. 65), Sharrow Grange, Ripon, 7.9., 16.9 (per S. M. Jackson).

AGRIUS CONVOLVULI L. KENT E. Dymchurch, 10.8 (J.

Owen).

*EUROIS OCCULTA L. SUSSEX E. West Dean, 13.8 (C. Robinson per CRP).

MYTHIMNA UNIPUNCTA Haw. GUERNSEY 17.10 (TNDP),

1.12 (P. Costen per TNDP).

SPODOPTERA EXIGUA Hbn. DEVON S. Axminster, 4.8. (E. C. Pelham-Clinton). KENT W. East Malling, 6.8. (D. A. Chambers).

HELICOVERPA ARMIGERA Hbn. DORSET Swanage, 30.9 (PJB, ibid.).

HELIOTHIS PELTIGERA D. & S. CORNWALL E. Lostwithiel, 25.6, two (FHNS).

Additional records have also been received of the following commoner immigrant species: *V. atalanta:* Hants. S., Woodfidley, 21.1, two seen flying; Yorks (v.c. 61), few after slow start, but frequent September and October: first Knaresborough 20.4, last 23.12. *C. cardui:* Yorks (v.c.61), Filey, 20.9; Guernsey, 16.8; Herm, 18.8. *C. crocea:* Cornwall E. & W., two; Devon S., one; Kent W., one; Yorks (v.c. 62), eight. *M. stellatarum:* Yorks (v.c.61), two; Cornwall W., two and larvae 25.8; Carmarthens, Ammanford 24 and 25.7. *A. ipsilon:* Axminster, 10.6/28.10, only few; Cornwall W., Coverack, 17.9, many; Yorks (v.c.63), two.

Notes and Observations

CHORISOPS NAGATOMII ROCK. (DIPTERA: STRATIOMYIDAE): FURTHER RECORDS FROM THE METROPOLIS — The recent note by A. A. Allen on *Chorisops nagatomii* Rock. from south-east London, (Ent. Rec. 97: 33), prompts me to place on record two captures made during the course of field work by staff at this Museum. Whilst not pre-dating Mr. Allen's first record for the metropolitan area, they nevertheless indicate a spread of this species into the region. The data are as follows:—

Hither Green N. R., Lewisham, [West Kent]: 5.ix.1984 (P. Kirby); Wanstead Park, [South Essex]: Sept. 1980 (C. W. Plant).

Both specimens are preserved in the general reference collections at this Museum. — COLIN W. PLANT, Passmore Edwards Museum, Romford Road, Stratford, London, E15 4LZ.

LATE CAPTURE OF CHLOROCLYSTIS CHLOERATA. MAB. (SLOE PUG) — A female of this species was captured in one of the Rothamsted Insect Survey light traps which operate on the station's grounds in Harpenden, Hertfordshire (Site number 34, Allotments, O.S. ref TL 134 134) on the night of 29/30.vii.1984. The identity was confirmed by examination of the genitalia. This species usually flies in May and early June. ADRIAN M. RILEY, Entomology Dept., Rothamsted Experimental Station, Harpenden, Herts.